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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,813

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1333 7590 09/10/2008  
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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT

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1794

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,813	<b>Applicant(s)</b> FRIOUR ET AL.	
	<b>Examiner</b> Betelhem Shewareged	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/4/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

2. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

3. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 11, 16 and 17 of copending Application No. 10/583,528 in view of Campbell et al. (EP 1 184 193 A2) and Poncelet et al. (US 6,179,898 B1). Current claims 1, 8-14 and 18-23 correspond to claim 1 of '528, where an ink jet recording element comprises a support and an ink receiving layer containing a binder and aluminosilicate. The support does not comprise a base and an upper layer as recited in current claim 1. However, Campbell teaches a support comprising a base polyester layer and an upper polyester layer as recited in current claims 1 and 18-23. At the time of the invention it would have

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been obvious to a person of ordinary skill in the art to combine the support of Campbell with the invention of '528, and the motivation would be, as Campbell suggests, to increase ink absorption rate and capacity, which allow rapid printing and a short drying time [0015]. Furthermore, the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate has not been recited in the current claims. However, Poncelet teaches the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate. At the time of the invention it would have been obvious to a person ordinary skill in the art to combine the teaching of Poncelet with the invention of '528, and the motivation would be, as Poncelet suggests, increasing the efficiency with respect to effluent treatment process (col. 3, lines 18-44). Current claim 2 corresponds to claim 2 of '528. Current claims 3-7 correspond to claims 2-8 of '528, respectively. Current claim 15 corresponds to claim 11 of '528. Current claims 16 and 17 correspond to claims 16 and 17 of '528, respectively.

This is a provisional obviousness-type double patenting rejection.

5. Claims 1-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 and 10-17 of copending Application No. 10/578,397 in view of Campbell et al. (EP 1 184 193 A2) and Poncelet et al. (US 6,179,898 B1). Current claims 1, 8-14 and 17-23 correspond to claim 1 of '397, where an ink jet recording element comprises a support and an ink receiving layer containing a binder and aluminosilicate. The ink receiving layer does not

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comprise a binder such as polyvinyl alcohol. However, Campbell teaches an image receiving layer comprising a polyvinyl alcohol. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the binder of Campbell with the invention of '397, and the motivation would be to control the binding property of the layer to the support. Furthermore, the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate has not been recited in the current claims. However, Poncelet teaches the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate. At the time of the invention it would have been obvious to a person ordinary skill in the art to combine the teaching of Poncelet with the invention of '397, and the motivation would be, as Poncelet suggests, increasing the efficiency with respect to effluent treatment process (col. 3, lines 18-44). Current claims 2-7 correspond to claims 2-7 of '397, respectively. Current claims 15-16 correspond to claims 10 and 11 of '397, respectively. Current claims 18-23 correspond to claims 12-17 of '397, respectively.

This is a provisional obviousness-type double patenting rejection.

6. Claims 1-5 and 8-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 7-18 of copending Application No. 10/563,693 in view of Campbell et al. (EP 1 184 193 A2). Current claims 1 and 18-23 correspond to claim 1 of '693, where an ink jet recording element comprises a support and an ink receiving layer containing a binder and aluminosilicate. The support does not comprise a base and an upper layer as recited in

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current claim 1. However, Campbell teaches a support comprising a base polyester layer and an upper polyester layer as recited in current claims 1 and 18-23. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the support of Campbell with the invention of '693, and the motivation would be, as Campbell suggests, to increase ink absorption rate and capacity, which allow rapid printing and a short drying time [0015]. Current claim 2 corresponds to claim 8 of '693. Current claims 3 and 4 correspond to claim 9 of '693. Current claim 5 corresponds to claim 10 of '693. Current claims 8 and 9 correspond to claims 11 and 12 of '693, respectively. Current claims 10 and 11 correspond to claim 13 of '693. Current claims 12-15 correspond to claims 14-17 of '693, respectively. Current claim 16 corresponds to claim 7 of '693. Current claim 17 corresponds to claim 18 of '693.

This is a provisional obviousness-type double patenting rejection.

7. Claims 1-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4-16, 23 and 24 of copending Application No. 10/521,898 in view of Campbell et al. (EP 1 184 193 A2). Current claims 1 and 18-23 correspond to claim 1 of '693, where an ink jet recording element comprises a support and an ink receiving layer containing a binder and aluminosilicate. The support does not comprise a base and an upper layer as recited in current claim 1. However, Campbell teaches a support comprising a base polyester layer and an upper polyester layer as recited in current claims 1 and 18-23. At the time of the invention it would have been obvious to a person of ordinary skill in

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the art to combine the support of Campbell with the invention of '898, and the motivation would be, as Campbell suggests, to increase ink absorption rate and capacity, which allow rapid printing and a short drying time [0015]. Current claim 2 corresponds to claim 2 of '898. Current claims 3-15 correspond to claims 4-16 of '898, respectively. Current claims 16 and 17 corresponds to claims 23 and 24 of '898, respectively.

This is a provisional obviousness-type double patenting rejection.

8. Claims 1-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 11, 17 and 18 of copending Application No. 10/522,006 in view of Campbell et al. (EP 1 184 193 A2) and Poncelet et al. (US 6,179,898 B1). Current claims 1, 8-14 and 18-23 correspond to claim 1 of '006, where an ink jet recording element comprises a support and an ink receiving layer containing a binder and aluminosilicate. The support does not comprise a base and an upper layer as recited in current claim 1. However, Campbell teaches a support comprising a base polyester layer and an upper polyester layer as recited in current claims 1 and 18-23. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the support of Campbell with the invention of '006, and the motivation would be, as Campbell suggests, to increase ink absorption rate and capacity, which allow rapid printing and a short drying time [0015]. Furthermore, the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate has not been recited in the current claims. However, Poncelet teaches the use of alkylalkoxysilane modified by a non-

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hydrolyzable organic radical in preparing the aluminosilicate. At the time of the invention it would have been obvious to a person ordinary skill in the art to combine the teaching of Poncelet with the invention of '006, and the motivation would be, as Poncelet suggests, increasing the efficiency with respect to effluent treatment process (col. 3, lines 18-44). Current claim 2 corresponds to claim 2 of '006. Current claims 3-7 correspond to claims 4-8 of '006, respectively. Current claim 15 corresponds to claim 11 of '006. Current claims 16 and 17 correspond to claims 17 and 18 of '006, respectively.

This is a provisional obviousness-type double patenting rejection.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-7 and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (EP 1 184 193 A2) in view of Poncelet et al. (US 5,888,711).

11. Claims 1-7: Campbell teaches an ink jet recording element comprising a substrate and a porous image receiving layer on the substrate, wherein the substrate contains a base polyester layer and an upper polyester layer on the base polyester layer, wherein the upper polyester layer has an ink absorbency rate of less than 10 seconds and a total absorbency capacity of at least 14 cm<sup>2</sup>/m<sup>2</sup> (abstract). The image



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receiving layer comprises a binder [0031] and organic particles [0030]. Campbell does not teach the organic particle comprises an aluminosilicate. However, Poncelet teaches a coating composition to be provided on a support (col. 2, line 26), wherein the coating composition comprises aluminosilicate polymer obtained from aluminum and silicon alkoxide in a presences of aqueous alkali, wherein the Al molar concentration being maintained in the range of 0.0005-0.02, Al/Si molar ratio between 1 and 3 (col. 1, lines 55-63) and the amount of the alkali, in moles, is between 2 and 3 times the amount of aluminum (col. 3, line 26). The aluminum, silicone alkoxide and aqueous alkali are mixed before heating (col. 1, lines 58-63), and byproducts such as residual ions are eliminated before coating the coating composition (col. 2, line 1). The coating composition does not contain a binder. The alkali comprises sodium or potassium {meets instant claim 2} (col. 3, line 20). The Al molar concentration being maintained in the range of 0.0005-0.02 {meets instant claims 3 and 4} (col. 1, lines 61 and 62). The amount of the alkali, in moles, is between 2 and 3 times the amount of aluminum {meets instant claims 5-7} (col. 3, line 26). Campbell and Poncelet are analogous art because they from similar problem solving area in relation to polymeric aluminosilicate material. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the aluminosilicate polymeric material of Poncelet with the invention of Campbell, and the motivation would be, as Poncelet suggests, providing a permeable and antistatic coating layer (col. 2, line 15).

12. Claim 16: Campbell teaches that the particle to binder ratio to be 1:1 to 15:1 [0032], which is calculated to be 50-93.7% of particles.

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13. Claim 17: Campbell teaches the binder can be gelatin or polyvinyl alcohol [0031].

14. Claim 18: Campbell teaches the base polyester layer comprises polyethylene terephthalate [0039].

15. Claim 19: Campbell teaches the upper polyester layer comprises PETG [0039].

16. Claim 20: Campbell teaches the upper polyester layer further comprises microbeads/voiding agent in an amount of 30-50% of the layer [0026].

17. Claim 21: Campbell teaches inorganic fillers such as silica, alumina, barium sulfate and calcium carbonate, and organic fillers such as polystyrene, polymethyl methacrylate, polycarbonate and polyolefins as the microbeads/voiding agents [0026].

18. Claim 22: Campbell teaches the particle size of the microbeads is between 0.1-50um [0026].

19. Claim 23: Campbell teaches the upper polyester layer has interconnecting voids [0019].

20. Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (EP 1 184 193 A2) in view of Poncelet et al. (US 5,888,711), as applied to claim 1 above, and further in view of Poncelet et al. (US 6,179,898 B1).

21. The combination of Campbell and Poncelet '711 teach the claimed invention as set forth above. Poncelet '711 further teaches aluminum halide is an example of the aluminum to obtain the aluminosilicate polymer and tetraethylorthosilicate is an example of the silicon alkoxide to obtain the aluminosilicate polymer (col. 5, 21-25). Poncelet

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'711 does not teach the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate. However, Poncelet '898 teaches the use of alkylalkoxysilane modified by a non-hydrolyzable organic radical in preparing the aluminosilicate (col. 3, line 19 and 20). At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of Poncelet '898 with the invention of Ponvelet '711, and the motivation would be, as Poncelet '898 suggests, increasing the efficiency with respect to effluent treatment process (col. 3, lines 18-44). Campbell and Poncelet '711 are analogous art because they from similar problem solving area in relation to polymeric aluminosilicate material. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the modified aluminosilicate polymeric material of Poncelet '711 and Poncelet '898 with the invention of Campbell, and the motivation would be, as Poncelet '711 suggests, providing a permeable and antistatic coating layer (col. 2, line 15).

### ***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is (571)272-1529. The examiner can normally be reached on Monday-Friday 9am-5pm.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BS

September 07, 2008.

/Betelhem Shewareged/  
Primary Examiner, Art Unit 1794.